

NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH YEAR February 2003
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Alan Gerard, MIC In Charge of HSA DATE March 10th , 2003

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOME-41)

Synopsis...

February brought us back into an el Nino pattern with the characteristic strong southern jet stream. February was significantly wetter than January across the Hydrologic Service Area.

A cold front pushed through on the 4th bringing with it scattered showers. Rainfall amounts were generally light, less than a half inch. A low pressure system moved across southeast Louisiana along a stalled frontal boundary on the 6th and 7th bringing showers and thunderstorms. Rainfall amounts ranged from .75 to just over 2 inches. On the 9th , another low pressure system moved through southeast Louisiana. Rainfall amounts were generally around .50 inches. On the 12th, another cold front moved through the area bringing little or no rainfall. From the 15th into the 16th, Yet another low pressure system moved through the area dropping 1.50 to around 2 inches of rainfall. Some portions of southwest Mississippi and northeast Louisiana reported 2.50 to near 3.25 inches.

The most significant event of the month occurred between 20th and 23rd. A stalled frontal boundary extended from Lake Providence, Louisiana to Columbus, Mississippi on the 20th. A gulf low moved across southwest Louisiana into central Mississippi through the period bringing heavy rainfall to most areas of the state. Rainfall amounts for the 72 hour period ending at 7am on the 23rd ranged from 2 inches over southeast Mississippi to near 9 inches over southwest Mississippi and the middle Pearl River basin. The heaviest reported 72 hour rainfall totals were: 8.90 inches at Brookhaven, MS; 7.87 inches at Meadville, MS; 7.44 inches at Prentiss, MS; 7.35 inches at Rockport, MS; 7.24 inches at Monticello, MS; 7.13 inches at Mize, MS; and 7.11 inches at Smithdale, MS. (See attachment 02_20-23_2003.gif for 72 hour rainfall plot)

The next rainfall event occurred from the 25th to the morning of the 27th. Another gulf lower pressure system moved across southeast Mississippi. Locally heavy rainfall occurred on the evening of the 26th. Rainfall amounts for this event ranged from .50 inches to around 1.75 inches in portions of the Pearl River basin.

River and Soil Conditions...

Soil moisture conditions began the month near normal; however with much above normal rainfall over all of the Hydrologic Service Area soil ended the month well above normal. The most significant flooding occurred during and after the rainfall event from the 20th to the 23rd. Significant flash flooding was reported over southern and southwest Mississippi and over areas just to the south of Jackson, Mississippi. In the Brookhaven, Mississippi area, numerous streets were flooded and washed out. Water went into several homes in the area. A small community dam broke in a subdivision in Rankin county northeast of Jackson. Richland Creek in southern Rankin county flooded causing some evacuations in the city of Richland, MS. Flash flooding was reported in many northeast Louisiana Parishes as well as in Yazoo county Mississippi.

Moderate to major flooding occurred in portions of the Pearl River basin. The Strong River, a Pearl River tributary, rose sharply. Water entered 1 home and forced others to leave their homes near D'lo in Simpson County. A death occurred on the river upstream of D'lo when a boat capsized while several men tried to rescue livestock. The Pearl River at Jackson rose to its highest levels in the last 20 years, cresting at 35.2 feet. Many streets were flooded in the Jackson area and several vacant structures received water.

Moderate flooding was also reported on the Chickasawhay River in east Mississippi and also on the Big Black River in central Mississippi, and along the Tallahala Creek.

Minor flooding occurred along the Yockanookany, Tuscolameta Creek, Yalobusha, Yazoo, Big Sunflower, Homochitto, Boeuf, Leaf, Bouie Creek, and the Chunky River.

With normal rainfall expected over the next several months and above normal soil moisture conditions, flood potential for HSA rivers should remain above normal. See the January E-3 report for information on flood crests.

Rainfall for the month of February...

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
Southeast Arkansas (Chicot & Ashley counties)	7.00 to 8.25 inches	Much above normal.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	7.75 to 8.75 inches northern sections	Much above normal.
	8.75 to 10.50 inches central sections	Much above normal.
	7.50 to 11.00 inches southern section	Much above normal
Lower Yazoo	7.50 to 9.00 inches	Much above normal.

<i>Big Black</i>	<i>8.00 to 9.75 inches upper section</i>	<i>Much above normal.</i>
	<i>9.00 to 9.75 inches lower and middle sections</i>	<i>Much above normal.</i>
<i>Homochitto/ Bayou Pierre</i>	<i>9.00 to 12.50 inches</i>	<i>Much above normal.</i>
<i>Pearl (abv Jackson)</i>	<i>8.75 to 12.50 inches</i>	<i>Much above normal.</i>
<i>Pearl (Blo Jackson)</i>	<i>9.00 to 13.50 inches</i>	<i>Much above normal.</i>
<i>Pascagoula</i>	<i>7.50 to 11.50 inches over the Leaf basin.</i>	<i>Much above normal.</i>
	<i>8.50 to 9.00 inches over the Black Creek basin.</i>	<i>Much above normal.</i>
	<i>6.50 to 8.50 inches over the Chickasawhay</i>	<i>Much above normal.</i>
<i>Tombigbee tributaries in the JAN HSA</i>	<i>7.50 to 13.75 inches</i>	<i>Much above normal</i>

The heaviest rainfall amounts in the HSA for the month were: 13.64 inches at Brookhaven, MS; 13.17 inches at Brooksville, MS; 12.79 inches at Crawford, MS; 12.57 inches at Prentiss, MS; 12.55 inches at Walnut Grove, MS; 12.24 inches at Meadeville, MS; 12.15 inches at Monticello, MS; 11.89 inches at Louisville, MS; 11.45 inches at Mize, MS.

Here at the Jackson WFO, the February monthly rainfall was 9.16 inches, which was 4.66 inches above normal. We have had 10.42 inches of rainfall through the end of February which was 0.25 inches above normal.

At the Meridian Airport, the February monthly rainfall was 6.79 inches, which was 1.44 inches below normal. Meridian had received 8.37 inches through the end of February which was 2.90 inches below normal.

Mississippi River...

The Mississippi River from Arkansas City, AR to Natchez, MS began the month well below seasonal norms; however by the end of the month, these points were all well above seasonal norms.

The provisional high and low stages for January are listed below:

<i>Location</i>	<i>High Stage(ft)</i>	<i>Date</i>	<i>Low Stage(ft)</i>	<i>Date</i>
<i>Arkansas City, AR</i>	<i>30.87</i>	<i>02/28</i>	<i>0.34</i>	<i>02/04</i>
<i>Greenville, MS</i>	<i>41.97</i>	<i>02/28</i>	<i>11.54</i>	<i>02/04</i>
<i>Vicksburg, MS</i>	<i>36.32</i>	<i>02/28</i>	<i>5.37</i>	<i>02/05</i>
<i>Natchez,MS</i>	<i>43.45</i>	<i>02/28</i>	<i>13.30</i>	<i>02/07</i>

Products issued...

Total Flood Warning products issued: 26

Total Flood Statement products issued: 169

Daily Rainfall Products (RRA'S) issued 28

Daily River Forecast Products (RVS'S) issued 28

Daily River Stage products (RVA'S) issued 28

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Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

*cc: USGS Little Rock District
USGS Ruston District
USCE Mobile District
USCE Vicksburg District
USCE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
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Pearl River Valley Water Supply District
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